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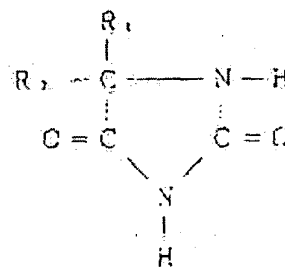
OSU MOTOMASA

## (54) PRODUCTION OF ALPHA-AMINO ACID

## (57)Abstract:

PURPOSE: To produce an  $\alpha$ -amino acid under mild conditions in high yield by hydrolyzing hydantoin in contact with water using an extremely highly active catalyst consisting of a complex metal oxide such as titanium oxide-zirconium oxide.

CONSTITUTION: Hydantoin [e.g. 5-( $\beta$ -methylthioethyl)-hydantoin] expressed by the formula [R1 and R2 are H, (substituted) lower alkyl, cyclohexyl or (substituted) phenyl] is hydrolyzed by bringing the hydantoin into contact with water in liquid phase using a complex metal oxide as a catalyst to provide the  $\alpha$ -amino acid (e.g. methionine). As the complex metal oxide of catalyst, titanium oxide-zirconium oxide, titanium oxide-aluminum oxide, zirconium oxide-tungsten oxide, molybdenum



oxide-aluminum oxide, etc., is especially used. The above-mentioned method is economical, since the above-mentioned reaction and aftertreatment can be carried out without using water-soluble acid and alkali.

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